related activities in Sp/Rec ($p < 0.01$). All KOOS subscales were associated with VAS pain in ExT group ($p< 0,0001$). The women of the IIA group demonstrated significant correlations between stair climbing test and ADL (r = -0.767, n=14, p=0.0014) and QL (r = -0,744, p= 0.0023).). In the IIB group no correlations were detected between the results of the functional performance tests and KOOS. In group III all KOOS subscales had reversal association (r= -0,247-0,436; p= 0,006-0,00001) with tibiofemoral osteophytes but not with patellofemaral ones.

Conclusions: 1. The effect of the long-term ExT expressed (out of 5 subscale of KOOS) moderately in ADL and substantially in SP/Rec, but also in QL scales.

2. To monitor long-term ExT, it is advisable to fill in the KOOS questionnaire every month, otherwise the fluctuations but also relapses occurring meantime remain undetected.

3. In general, after 3 year period without ExT women with early grades of knee OA had more symptoms and more functional limitations in SP/Rec activities.

4. All KOOS subscales were associated with tibiofemoral osteophytes at follow-up

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EFFICACY OF INTRA-ARTICULAR HYALURONAN (HYALGAN®) IN A DOUBLE-BLIND STUDY FOR OSTEOARTHRITIS OF THE ANKLE

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Purpose: The benefit of intra-articular (IA) hyaluronan (HA) in alleviating the symptoms of osteoarthritis (OA) associated with other diarthrodial joints other than the knee is of increasing interest. We performed a pilot study to examine the safety and efficacy of IA HA in the treatment of ankle OA.

Methods: 30 consecutive patients with ankle OA (documented by X-ray) were entered into a 12-week double-blind, randomized, controlled study comparing 5 IA injections of HA 2cc vs saline (S) 2cc in the tibiotalar joint. The primary outcome variable was pain relief upon movement and weightbearing using the Ankle Osteoarthritis Scale (AOS). Additional measures included the WOMAC, patient global assessment, SF-12 Health Survey, and all adverse events (AEs).

Results: There were no significant differences between the study groups in demographics (mean age 50, 90% men, mean BMI 30, 43% with right ankle involvement, 80% with history of trauma, mean Kellgren-Lawrence grade 2.5, and all with reduced plantar flexion on range of motion), or baseline assessments (AOS pain 72.3, AOS disability 84.0, WOMAC pain 50.3, WOMAC function 54.0). 80% of the HA and 73% of the S patients completed the study. Change from baseline to final visit data are presented. An average of 46% improvement in the AOS pain subscore was observed in the HA group compared to an 8% in the control. Despite the numeric superiority of the HA group, there were no statistical differences except at 3 months.

Table 1. Change From Baseline

Treatment	AOS Pain	AOS Disability	WOMAC Pain	WOMAC Function	Patient Global
HA	-15.0	-21.0	-16.4	-17.0	-1.6
S	-5.9	-9.5	-8.8	-5.5	-1.1

The incidence of AEs was low with no significant differences between groups. There were no post-injection flares.

Conclusions: In this pilot study in OA of the ankle, mostly related to a significant history of trauma, 5 weekly injections of HA was a safe with numeric but not statistical superiority over S.

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BIOMECHANICAL STUDY IN CHONDRAL LESIONS TREATED WITH PLASMA RICH IN GROWTH FACTORS

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Purpose: To study the mechanical behaviour of tissue repair in chondral lesions treated with Plasma Rich in Growth Factors (PRGF) and to compare with normal cartilage.

Methods: 5mm diameter x 4mm depth lesions was realized in 12 rabbit's femoral condyles. The treatment consisted in 7 intraarticular injections of autologous PRGF every two days. The rabbit's femoral condyles, of animals euthanized at 16 (6) and 19 (6) weeks old (5 and 8 weeks after the surgery), were analyzed. At the same time, another 12 samples (16 and 19 weeks old) from health animals were obtained to compare their behaviour with PRGF group. Indentation study was made to get the maximum and equilibrium load (Pmax and Peq) of the cartilage and tissue repair. The samples received compression loads, following the method described by Jin and Lewis (2004). A 0,15 milimeters (mm) depth deformation in 0,15 seconds (s) was made and it was supported during 1200s. Poisson rate (v), Young module (E) and Shear module (G) were calculated with the theoretical model described by Hayes et al. (1972) (Viscoelastic Lineal Model). Statistical for Windows: ANOVA with $p<0,05$ was used to statistical analysis.

Results: The results can be classified in direct results: highest and equilibrium load; and indirect results: highest and equilibrium v, E and G. (Table 1).

Conclusions: The tissue repair in PRGF group had a viscoelastic behaviour just like the control group, although the values of Control group were higher than PRGF group. As the age increase, the "rigidity" of the both groups was greater with statistical differences between times.

P313 – Table 1. Statistical Data Found

Groups			Pmax2 (N)	Peq2 (N)	Vmax-Veq	Emax (MPa)	Eeq (MPa)	Gmax (MPa)	Geq (MPa)
PRGF	16 weeks	X	27,603* **	1,277	0,197	25,008* **	1,790	10,245* **	0,748
		SD	16,487	1,523	0,000	8,196	1,621	3,588	0,677
	19 weeks	X	44,522* **	2,987	0,197	37,452* **	3,099	15,645* **	1,293
		SD	13,875	3,304	0,000	12,692	2,639	5,302	1,103
CONTROL	16 weeks	X	59,597* **	1,073*	0,197	54,572* **	3,446	22,796* **	1,439
		SD	21,749	0,473	0,000	28,586	3,796	1,941	1,586
	19 weeks	X	88,680* **	2,547*	0,197	85,761* **	3,837	35,843* **	1,603
		SD	16,772	1,260	0,000	20,189	2,843	8,433	1,187

X: median; SD: standard deviation; *$p<0,05$.